Practitioner's Docket No. 1321.28 *PATENT*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Alfredo J. Teran et al.** Group Art Unit: **Unassigned**
Application No.: **09/681,907**
Filed: **06/22/2001**
For: **Method For Treating Dye Wastewater**

Hon. Assistant Commissioner for Patents
Washington, D.C. 20231

PETITION TO MAKE SPECIAL FOR INVENTIONS FOR ENVIRONMENTAL QUALITY (37 C.F.R. 1.102(d) AND M.P.E.P. § 708.02, V)

Applicant hereby petitions to make this application special as being for an invention that materially contributes to enhancing the quality of the environment of mankind by contributing to the restoration or maintenance of the basic life-sustaining natural elements, i.e., air, water, and soil.

1. Accompanying this petition is a statement by applicant's attorney explaining how the invention materially contributes to enhancing the quality of the environment.

2. In accordance with 37 C.F.R. 1.102(c), no fee is required for this petition.

Dated: June 26, 2001

SIGNATURE OF PRACTITIONER

Reg. No. 46,920
Tel. No.: (727) 507-8558

Matthew G. McKinney
SMITH & HOPEN, P.A.
15950 Bay Vista Drive
Suite 220
Clearwater, FL 33760

CERTIFICATE OF MAILING (37 C.F.R. 1.8)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the united States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231 on June 26, 2001.

Deborah Preza

Date: June 26, 2001

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Washington, D.C. 20231

DECLARATION OF FACTS IN SUPPORT OF PETITION TO MAKE SPECIAL FOR INVENTIONS FOR ENVIRONMENTAL QUALITY (M.P.E.P. § 708.02 V)

I, Matthew G. McKinney, Esq., am the attorney of record for the above-entitled application; and I hereby state the following:

This invention materially enhances the quality of the environment of mankind by contributing to the restoration or maintenance of the basic life-sustaining natural elements, i.e., air, water, and soil.

The current practice of locating surface flaws or cracks of metal parts can be accomplished using penetrant inspection methods. The penetrant inspection methods are well known in various industries, especially the auto-maker industry. The penetrant contains a hazardous fluorescent dye that can penetrate the openings of surface cracks or flaws in the metal part. The penetrant is applied to the entire surface area of the metal part. The excess hazardous penetrant composition is removed from the part using rinse water so that penetrant will only be embedded in the surface flaws and cracks.

Volatile solvents such as methyl ethyl ketone, kerosene or other highly volatile solvents are used in the fluorescent penetrant composition. The rinse water used to remove the excess penetrant is considered a hazardous wastewater. Different types of systems for treating the

hazardous wastewater are available. The first type of treatment system consists of simply using evaporation to remove the water from the wastewater leaving a thick sludge residue. The hazardous sludge must be treated and properly disposed. Evaporators use high levels of energy to remove the water and can be inefficient. The second type of treatment system currently available consists of using filtration to remove the hazardous materials from the wastewater. A series of filters are used which have to be replaced periodically at high cost. The used filters contain hazardous materials and must be treated and properly disposed. The commercially available filters cannot meet the required environmental standards for discharge.

One common problem to all commercially available treatment systems is the fact that the systems can only be designed to handle certain flow rates and levels of waste concentration. Thus, if the flow rate or concentration fluctuates beyond designated thresholds, the efficacy of the treatment system will be minimal.

The longstanding but heretofore unfulfilled need for an improved method for treating wastewater is now met by a new, useful, and nonobvious method provided by the Applicant. In a first embodiment, the Applicant's method for treating wastewater includes the steps of providing an ozone system, collecting wastewater in a tank means, transferring the wastewater from the tank means to the ozone system, oxidizing the wastewater at the ozone system, transferring the oxidized wastewater to the tank means, monitoring the amount of oxidation of the wastewater, and repeating the process either as a batch process or as a continuous process until the amount of oxidation declines to a predetermined level. When the oxidation has reached a predetermined level, the wastewater may be re-used as rinse water or discharged to a filtration means for polishing and further reducing contaminates from the wastewater.

In a second embodiment, the wastewater is pre-treated by separating contaminates therefrom before the wastewater is delivered to the ozone system. The pre-treating step preferably includes the step of aerating the wastewater so that contaminates float atop the aerated water. The contaminates are then either skimmed off the top or decanted from the top of the wastewater. The pre-treated wastewater is then routed to the ozone system and the balance of the

second embodiment follows the steps of the first embodiment. A primary object of the invention is to provide a treatment methodology of a dye, especially a fluorescent dye known as "penetrant".

The Applicant's invention will treat the wastewater with ozone and oxidize the dye by breaking it down to an ultimately non-hazardous substance rendering the water acceptable for disposal or re-use. The Applicant also provides for a wastewater treatment system that is capable of treating the wastewater efficiently by maximizing the mass transfer of ozone in the waste. A polishing filtration system is provided after the wastewater has passed through the ozone system, thus further reducing the contamination rendering the quality of the treated water as good as city water.

As the above-entitled invention provides a significant contribution to materially enhancing the quality of the environment of mankind within the provisions of Section 702.02 V of the Manual of Patent Examining Procedure. Accordingly, it is respectfully requested that the above-entitled patent application be assigned "Special Status" and taken out of turn on an expedited basis.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under §1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Very respectfully,

SMITH & HOPEN

Dated: June 26, 2001

By: _____

Matthew G. McKinney
Reg. 46,920
15950 Bay Vista Drive, Suite 220
Clearwater, FL 33760
(727) 507-8558